

1/20/03

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-3 (Canceled).

4. (Currently Amended) A The method, as recited in claim 3 for forming a dual damascene interconnect in a dielectric, comprising:

etching a first aperture in the dielectric;

forming a poison barrier layer over part of the dielectric, which prevents resist poisoning;

forming a patterned mask over the poison barrier layer; and

etching a second aperture into the low-K dielectric layer, wherein at least part of the first aperture shares the same area as at least part of the second aperture, wherein the first aperture is a via and the second aperture is a trench wherein the via is within the trench, wherein the forming the poison barrier layer comprises plasma treating surfaces of the first aperture to neutralize nitrogen on the surfaces of the first aperture.

5. (Original) The method, as recited in claim 4, wherein the plasma treating oxidizes the surfaces of the first aperture to prevent nitrogen from diffusing out to poison the resist.

6-14 (Canceled).

15. (Currently Amended) A The method, as recited in claim 14 for forming a dual damascene interconnect in a dielectric, comprising:

etching a first aperture in the dielectric, wherein the dielectric is a low-K dielectric;

forming a poison barrier layer over part of the dielectric, which prevents resist poisoning;

forming a patterned mask over the poison barrier layer;

etching a second aperture into the low-K dielectric layer, wherein at least part of the first aperture shares the same area as at least part of the second aperture, wherein the first aperture is a via and the second aperture is a trench, wherein the via is within the trench, wherein the forming the poison barrier layer comprises plasma treating surfaces of the first aperture to neutralize nitrogen on the surfaces of the first aperture;

placing a copper diffusion barrier layer over surfaces of the first aperture and second aperture; and

filling the first aperture and second aperture with copper.

16. (Original) The method, as recited in claim 15, wherein the plasma treating oxidizes the surfaces of the first aperture to prevent nitrogen from diffusing out to poison the resist.

17-20 (Canceled).